



USAID
FROM THE AMERICAN PEOPLE

Immunization: Global Architecture

**National Vaccine Advisory Committee
U.S. Dept of Health and Human Services**

Susan McKinney
8 February 2012



USAID
FROM THE AMERICAN PEOPLE

Presentation Overview

- Background
- Who is engaged in global immunization and their role
- Role USAID plays in global immunization



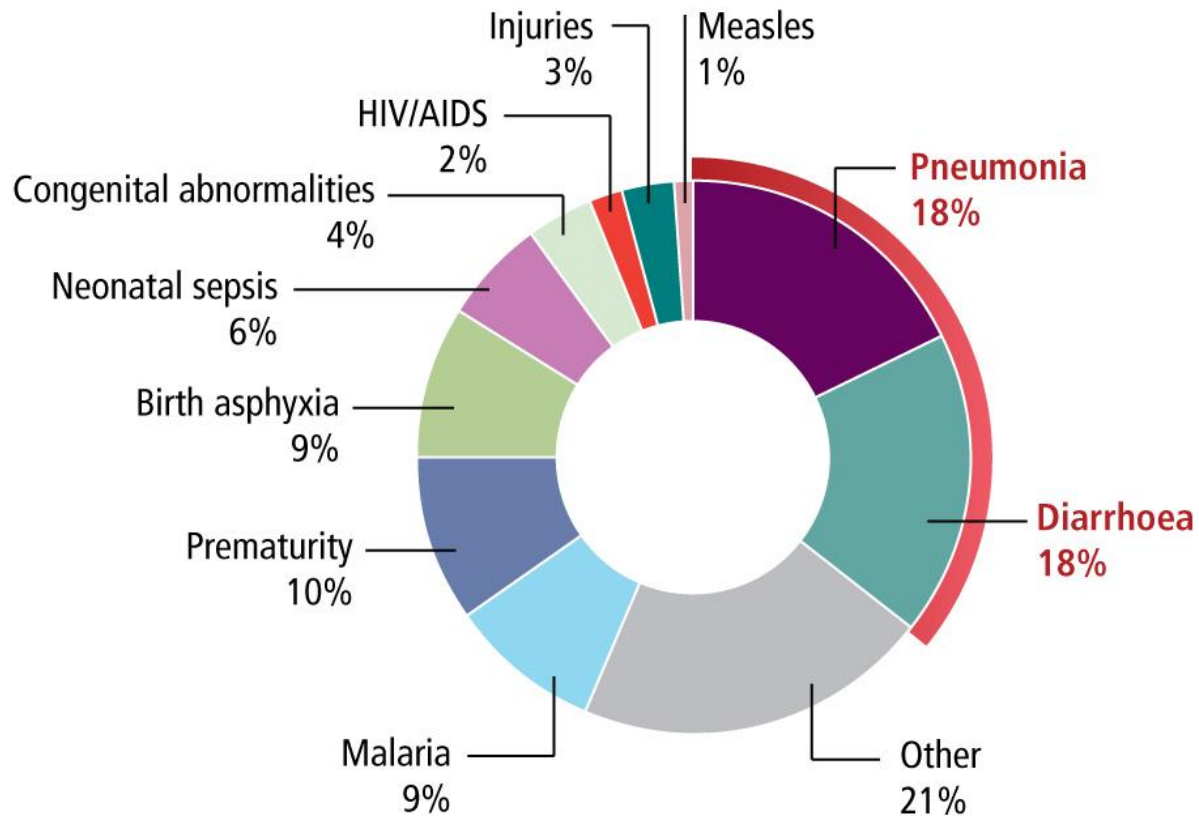
USAID
FROM THE AMERICAN PEOPLE

Background



USAID
FROM THE AMERICAN PEOPLE

Causes of child deaths in low-income countries

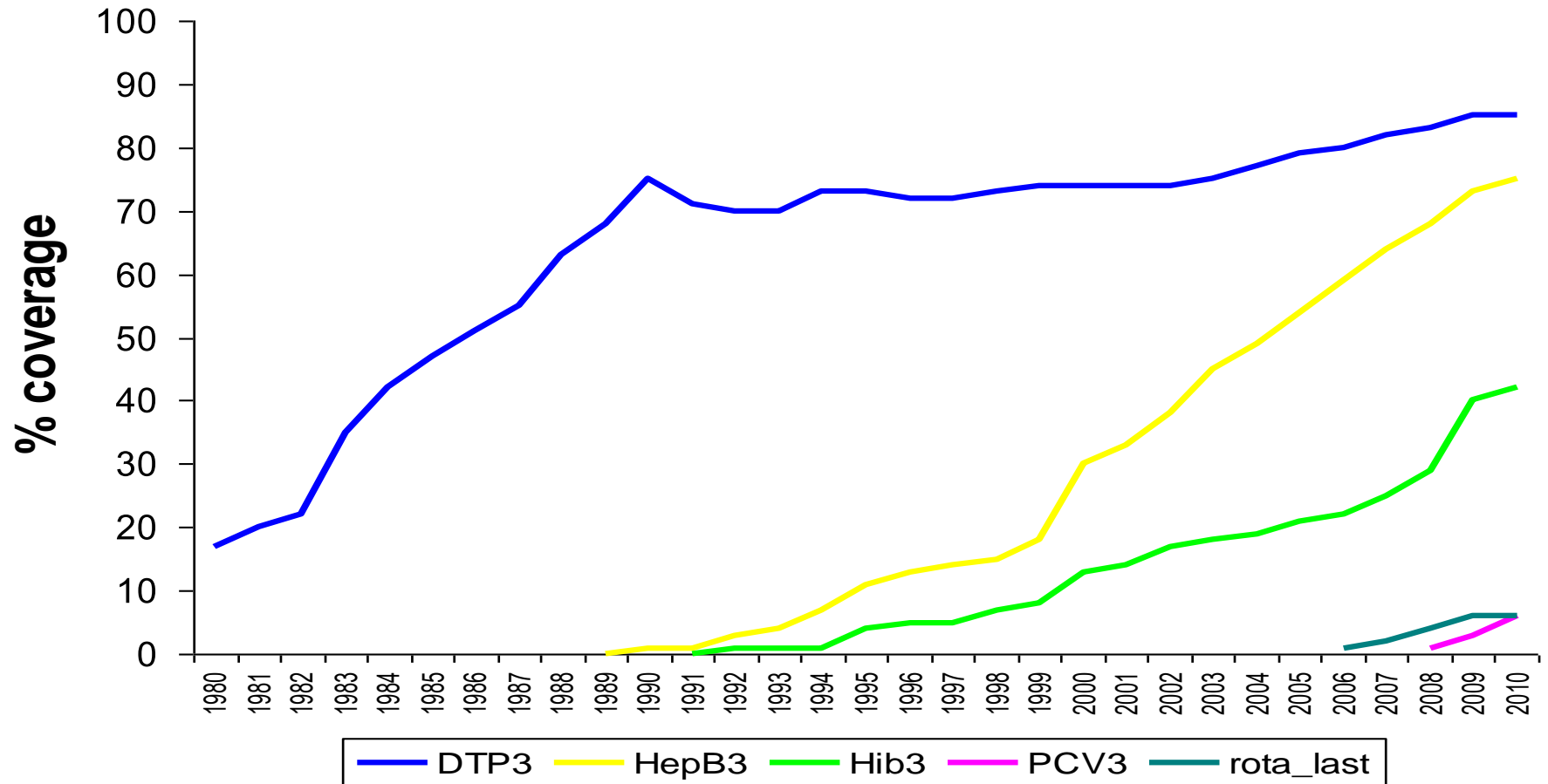


Source: WHO, World Health Statistic 2001



USAID
FROM THE AMERICAN PEOPLE

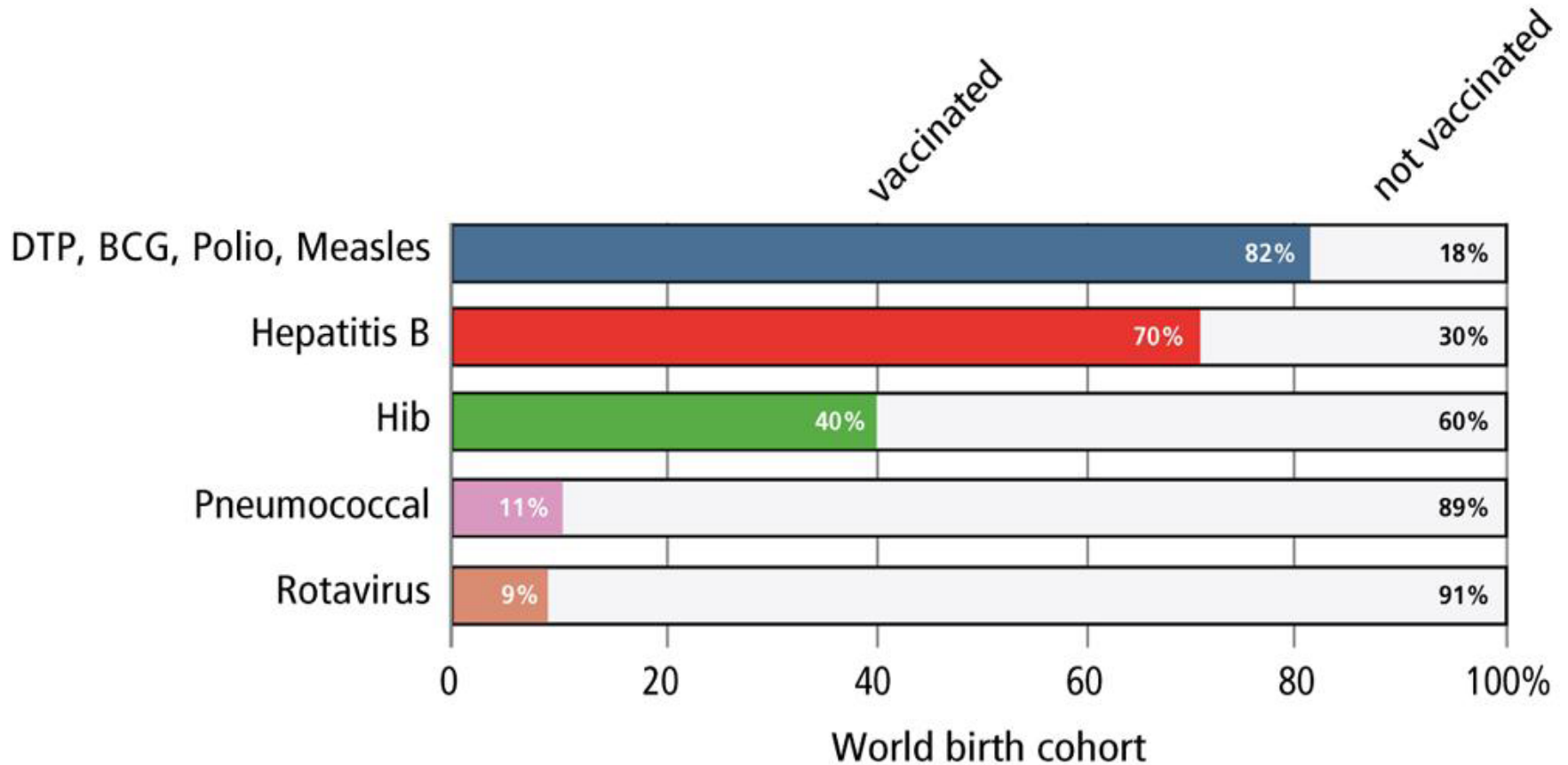
Global coverage estimates, 1980-2010 DTP3, HepB3, Hib3, PCV3 and Rota





USAID
FROM THE AMERICAN PEOPLE

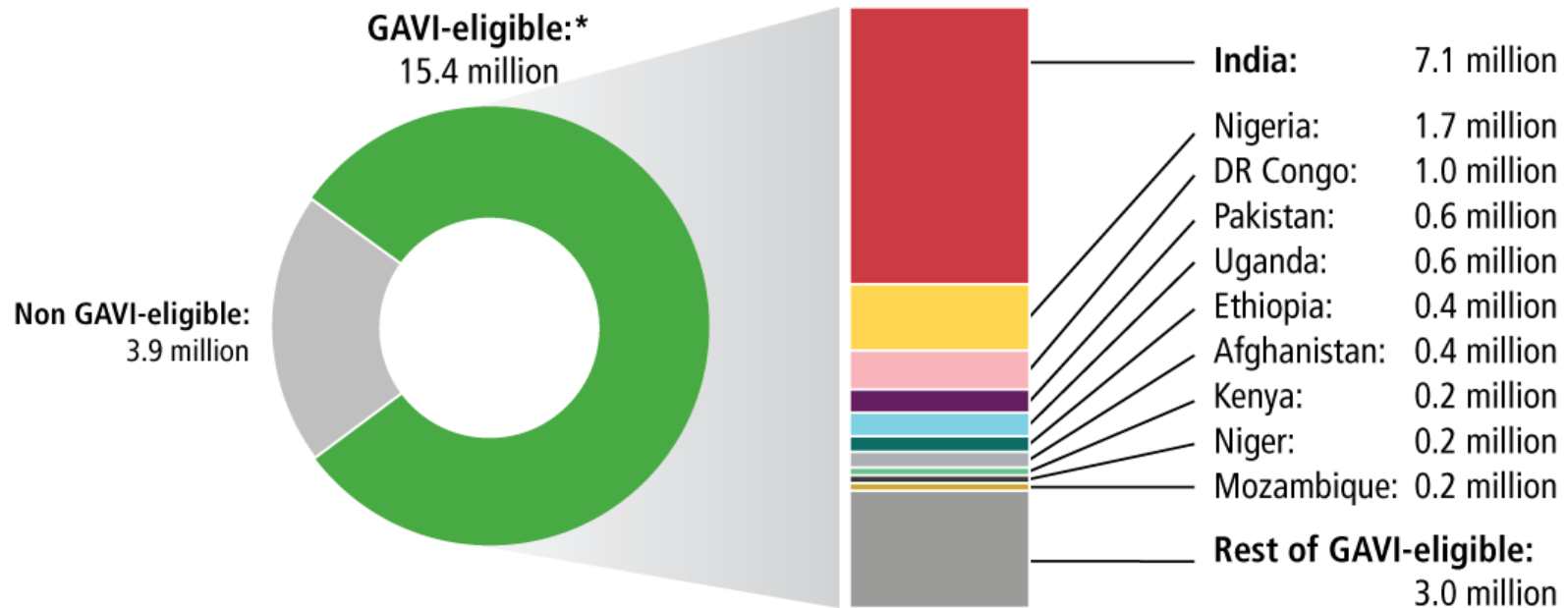
136 million surviving newborns in 2010:





USAID
FROM THE AMERICAN PEOPLE

19.3 million under-fives unimmunised with 3 doses of DTP in 2010



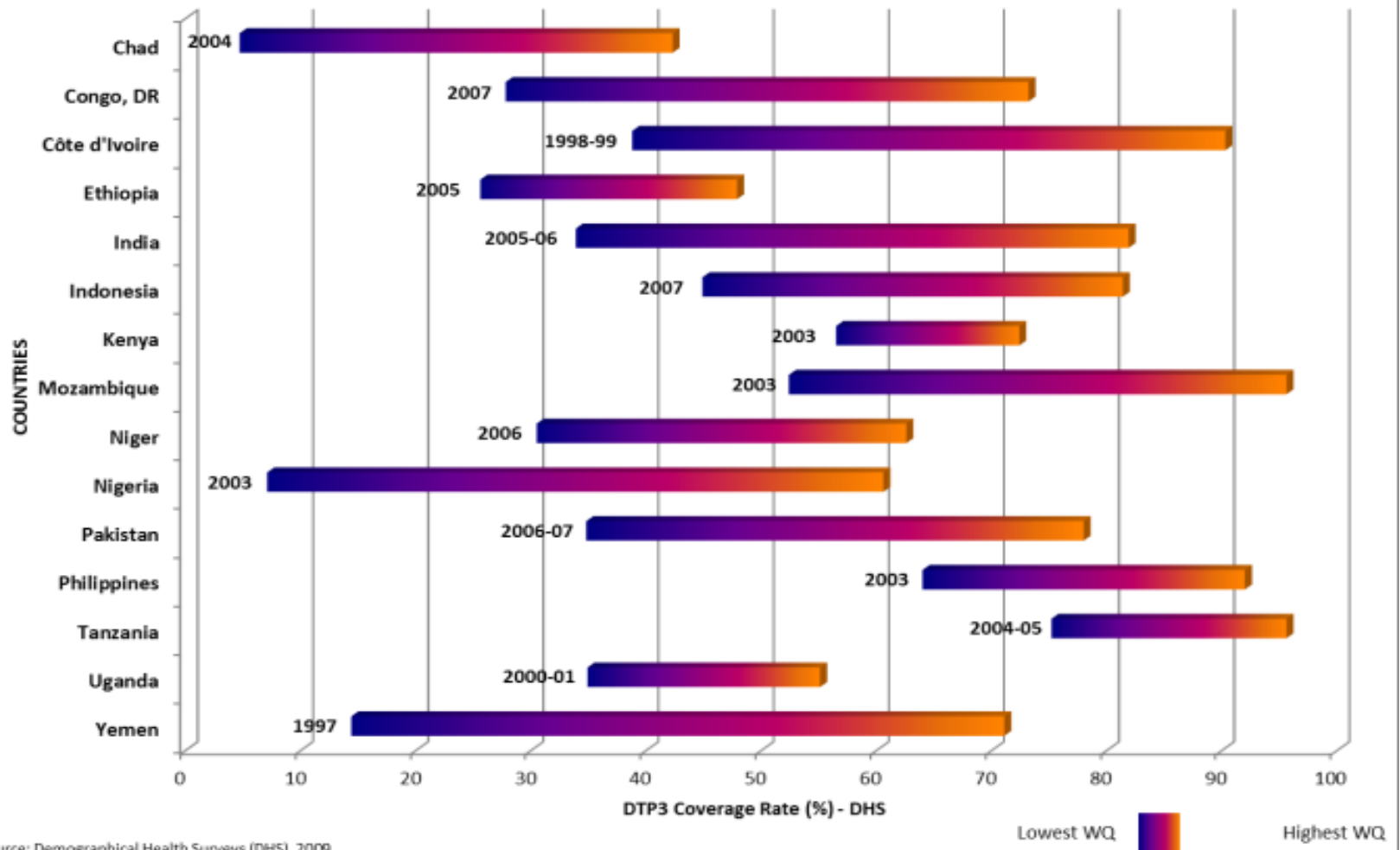
*From 2011, GAVI has 57 eligible countries.



USAID
FROM THE AMERICAN PEOPLE

Equity in DTP3 coverage

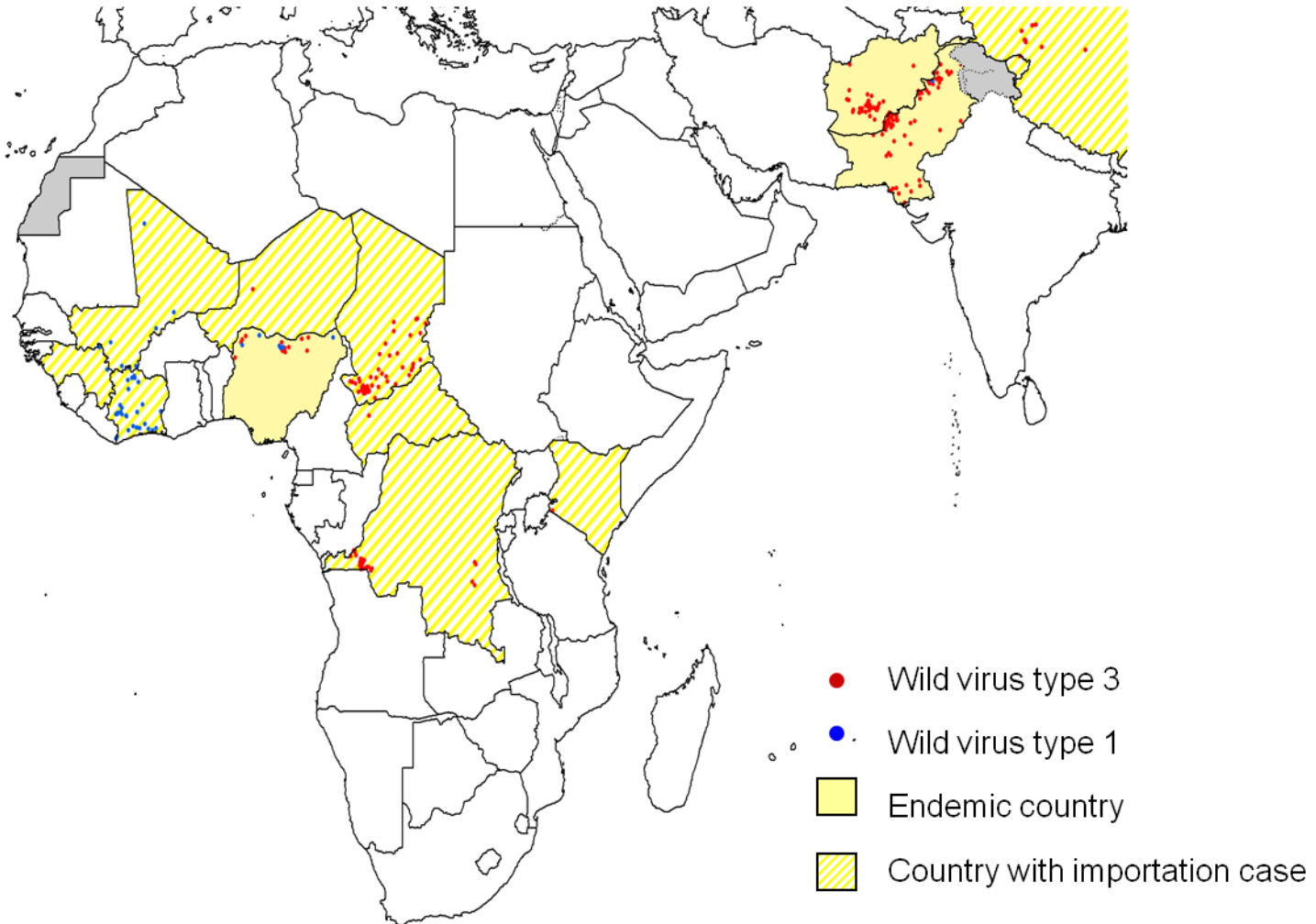
15 Countries w/ Largest Unimmunized Population - Equity in DTP3 Coverage
Between the **lowest** and **highest** Wealth Quintile





USAID
FROM THE AMERICAN PEOPLE

Children Paralyzed by Wild Polioviruses Last 6 Months: WHO





USAID
FROM THE AMERICAN PEOPLE

Who's involved? (who isn't?)

country governments WHO UNICEF World Bank
CDC USAID FDA NIH
Bill and Melinda Gates Foundation American Red Cross
NGOs the world over CORE Group
Johns Hopkins University The London School
many universities PATH SAVE CARE MSF
AMP multiple donor governments regulatory authorities
vaccine manufacturers from around the world
investors with a conscience
etc. etc. etc.



USAID
FROM THE AMERICAN PEOPLE

A sample of the panoply of immunization/ vaccine partnerships

Initiative	Focus	Key Partners
GAVI Alliance	Sustainably introduce new and under-used vaccines; advocate	UN agencies, donors, BMGF, countries, technical institutions, CSOs, industry, with countries, etc
Measles Partnership	Measles	American Red Cross, UN Foundation, CDC, WHO, UNICEF with countries
Global Polio Eradication	Polio	WHO, UNICEF, Rotary, CDC, BMGF, USAID, NGOs, others with countries
Multiple vaccine development partnerships	Development of appropriate vaccines for use in DCs	BMGF, multiple development partners (donors and technical), industry, others



USAID
FROM THE AMERICAN PEOPLE

WHO Mandate Immunization Vaccines & Biologicals

- Housing scientific expertise and disseminating global immunization intelligence
 - Convening the world's leading expertise in Immunization, Vaccines and Biologicals
 - Facilitating technical cooperation with member states*, technical institutions, academia and public/private partnerships
 - Coordinating technical assistance to member states
- *194 Member States across Six Regional Offices



USAID
FROM THE AMERICAN PEOPLE

WHO Core Functions

Immunization, Vaccines and Biologicals

Immunization Policy	<ul style="list-style-type: none">▪ Development of policy recommendations and strategies for use of vaccines▪ Support the strengthening of national decision making processes
Vaccine and Implementation research	<ul style="list-style-type: none">▪ Research agenda setting and horizon scanning of innovative vaccines and related technologies▪ Support to vaccine development and evaluation▪ Implementation research and evidence for policy
Vaccine Quality and Safety	<ul style="list-style-type: none">▪ Regulatory standards to assure quality, safety and efficacy of vaccines and biologicals▪ Prequalification of vaccines and immunization related technologies▪ Strengthening of National Regulatory Authorities▪ Standards and tools for pharmaco-vigilance and response to immunization safety alerts
Programme Performance and New Vaccines Introduction	<ul style="list-style-type: none">▪ Guidance and best practices on immunization systems (e.g., multi-year planning and costing, vaccine management and logistics)▪ Tools and guidance to support informed decision making and effective processes for new vaccine introduction in countries▪ Guidance on comprehensive disease control approaches▪ Support polio eradication and other accelerated control initiatives (e.g., measles, rubella and Meningococcal A meningitis)▪ Monitoring burden of vaccine preventable diseases and impact of immunization, (standards for global data collection and analysis, disease surveillance, immunization coverage monitoring)▪ Monitoring immunization delivery (operational research, programme evaluations)▪ Analysis of immunization financing trends to inform policies and strategies for sustainable immunization programmes



USAID
FROM THE AMERICAN PEOPLE

UNICEF: Immunization Program Division

- UNICEF supports a wide array of activities at country, regional and global levels
- UNICEF works in support of governments and in collaboration with partners (e.g. GAVI)
- Focus on:
 - Demand creation and social mobilisation
 - Supply, logistics and cold chain systems
 - Reaching the Unreached (reduce inequities by focusing on immunizing the “Fifth Child”)



USAID
FROM THE AMERICAN PEOPLE

UNICEF Supply Division

UNICEF's global supply function

Supply of strategic-essential supplies
Improve delivery performance
Ensure end to end supply chain expertise on high impact supplies
Promote innovation
Ensure emergency Response

Innovation & Integration

Enhance supply-programme integration in operations
Improve funding and financing mechanisms available to secure vaccine supply
Increased involvement in strategic planning activities for improved supply programme integration.

Supporting New Vaccine introduction

Support UN and WHO in Pandemic flu preparedness
Enhance knowledge of new vaccines and development of procurement expertise
Support New Vaccine introduction in MICs

Capacity Building and Partnerships

Increased Partner interaction
Enhance communication
Share Knowledge to support countries
Enhance Staff's personal and professional development
Enhance support to RO and CO

- **Enhancement of the core VC strategy**

Ensure coordinated and efficient supply to countries
Improve operational efficiency, increased focus on monitoring
Implement appropriate emergency and outbreak preparedness and response
Ensure appropriate risk management procedures and processes in place



USAID
FROM THE AMERICAN PEOPLE

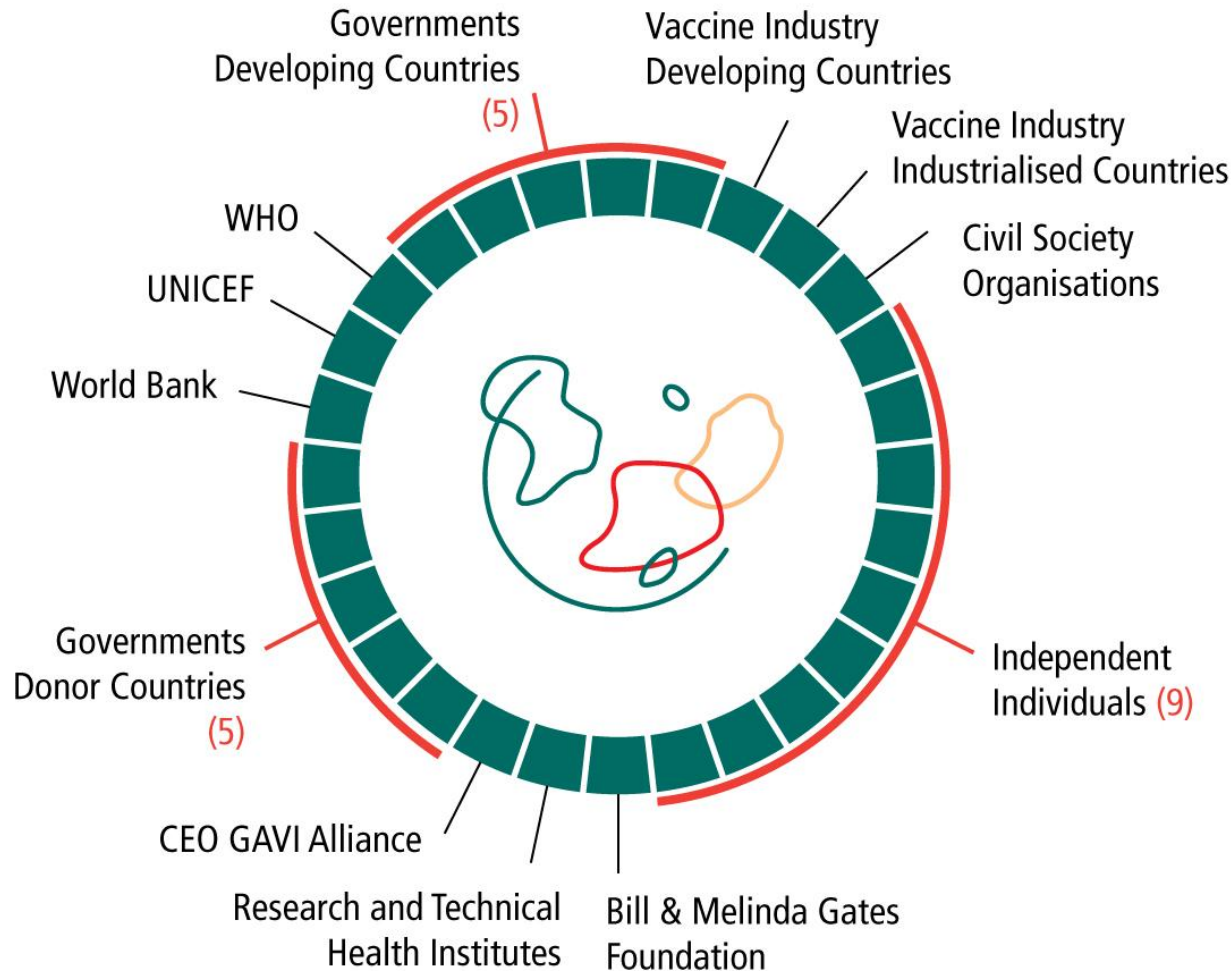
Bill and Melinda Gates Foundation (BMGF)

- Investing billions in Global Health
- Vaccines & Immunization – a focus of their global health strategy
 - Discovery
 - Development
 - Delivery
 - Advocacy
- Multi pronged approach and a very engaged partner in many areas of vaccine development and immunization
- Positioned to take risks and do so gladly



USAID
FROM THE AMERICAN PEOPLE

GAVI: An Alliance





USAID
FROM THE AMERICAN PEOPLE

GAVI: Four strategic goals Strategic plan 2011-2015

**Accelerate the uptake
of underused and new
vaccines**

**Contribute to
strengthening the
capacity of integrated
health systems to
deliver immunisation**

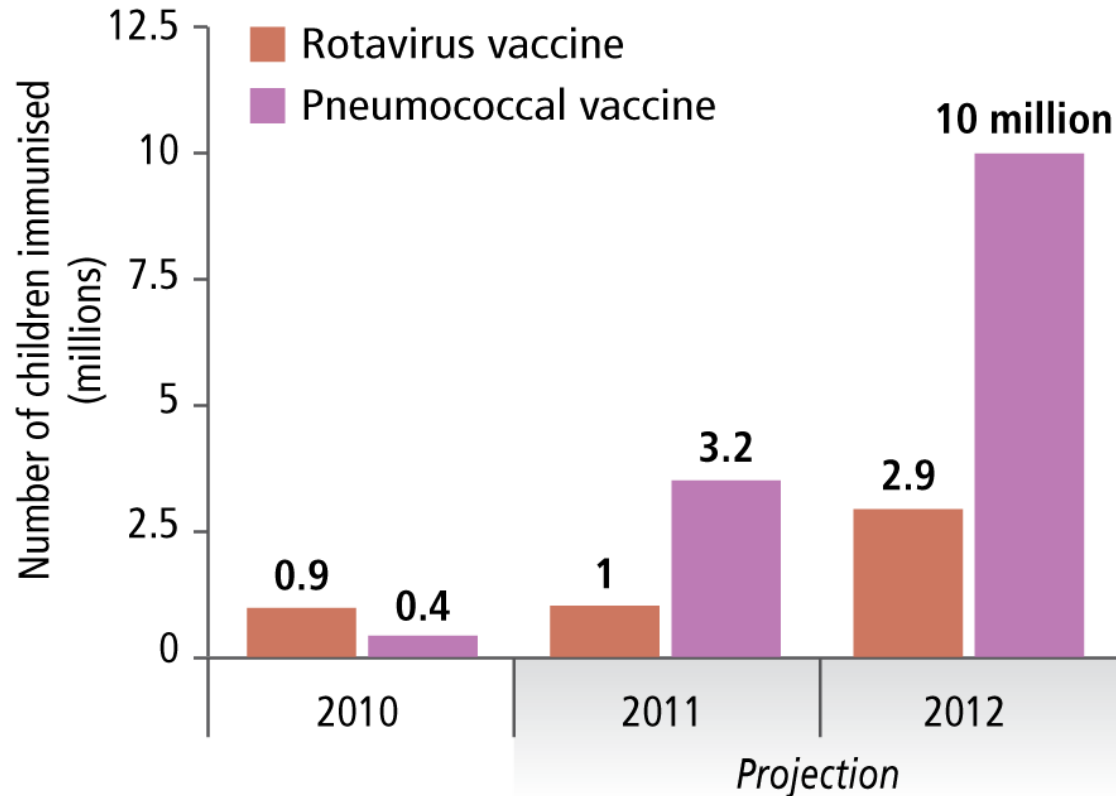
**Improve the
sustainability of
national financing for
immunisation and
increase predictability
of global financing**

**Shape vaccine
markets to provide
appropriate vaccines at
sustainable prices**



USAID
FROM THE AMERICAN PEOPLE

GAVI: Children immunised with pneumococcal and rotavirus vaccines

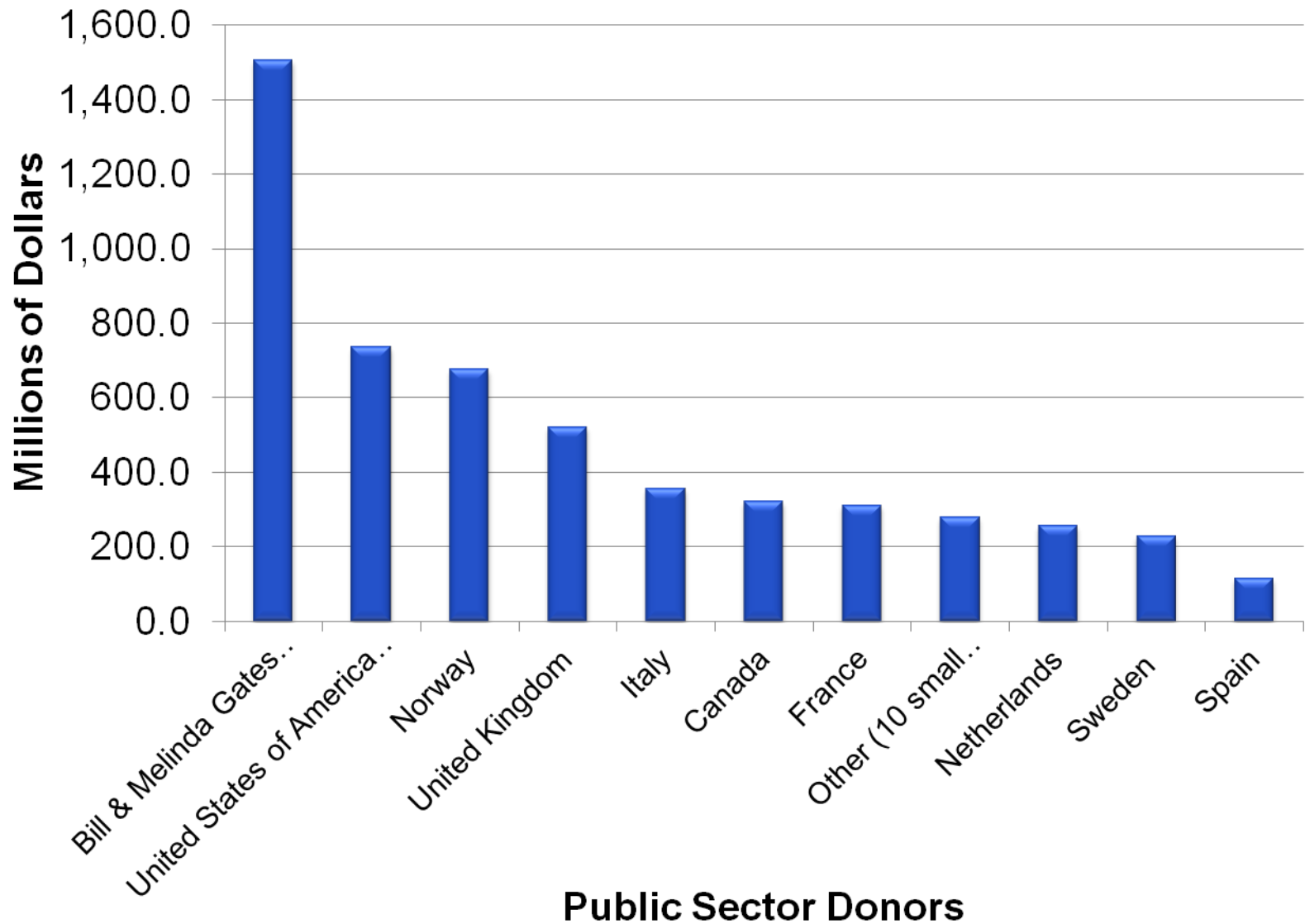


Source: WHO-UNICEF coverage estimates for 1980-2010, as of July 2011. Coverage projections for 2011-2012, as of September 2011. World Population Prospects, the 2010 revision. New York, United Nations, 2010 (surviving infants).



USAID
FROM THE AMERICAN PEOPLE

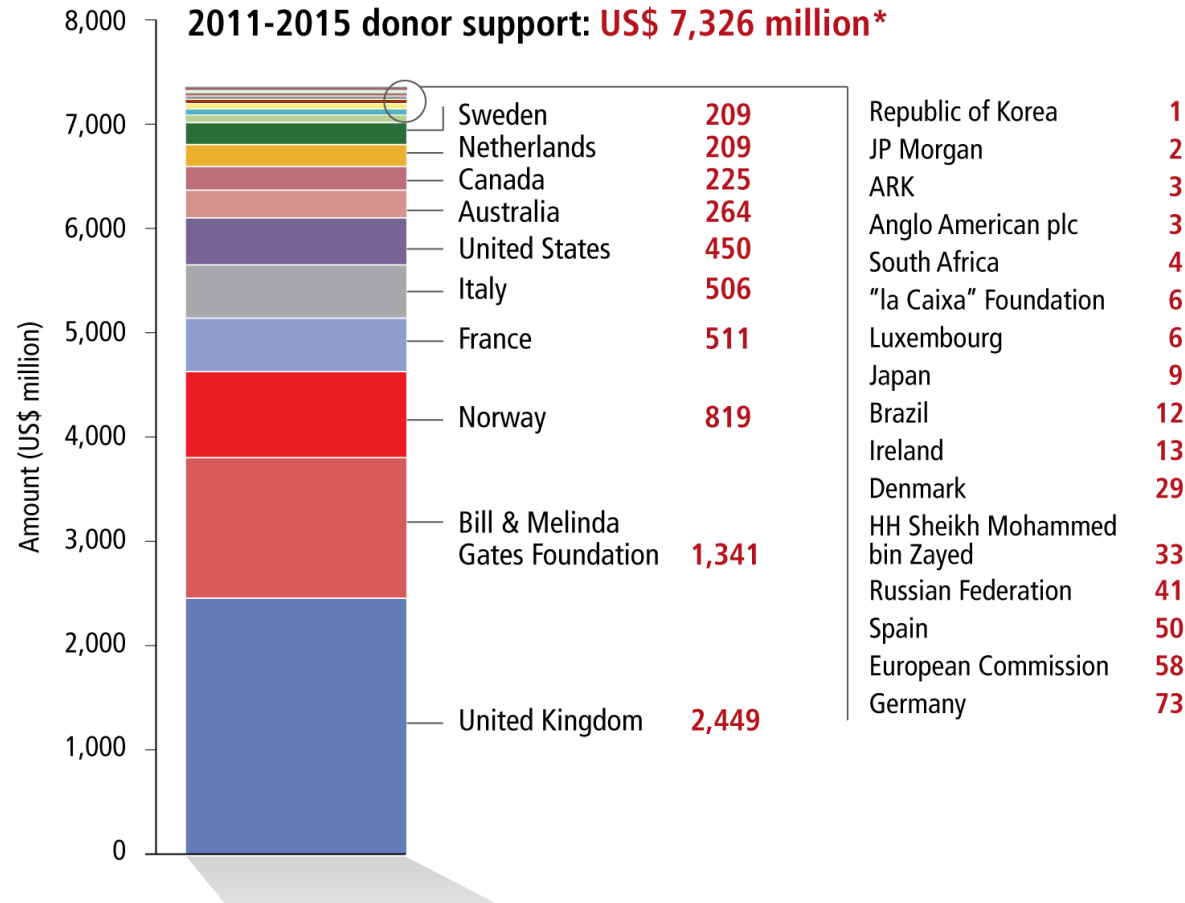
Cash contributions to GAVI 2000-2011





USAID
FROM THE AMERICAN PEOPLE

GAVI Donors have contributed or pledged US\$ 7.6 billion for 2011-2015



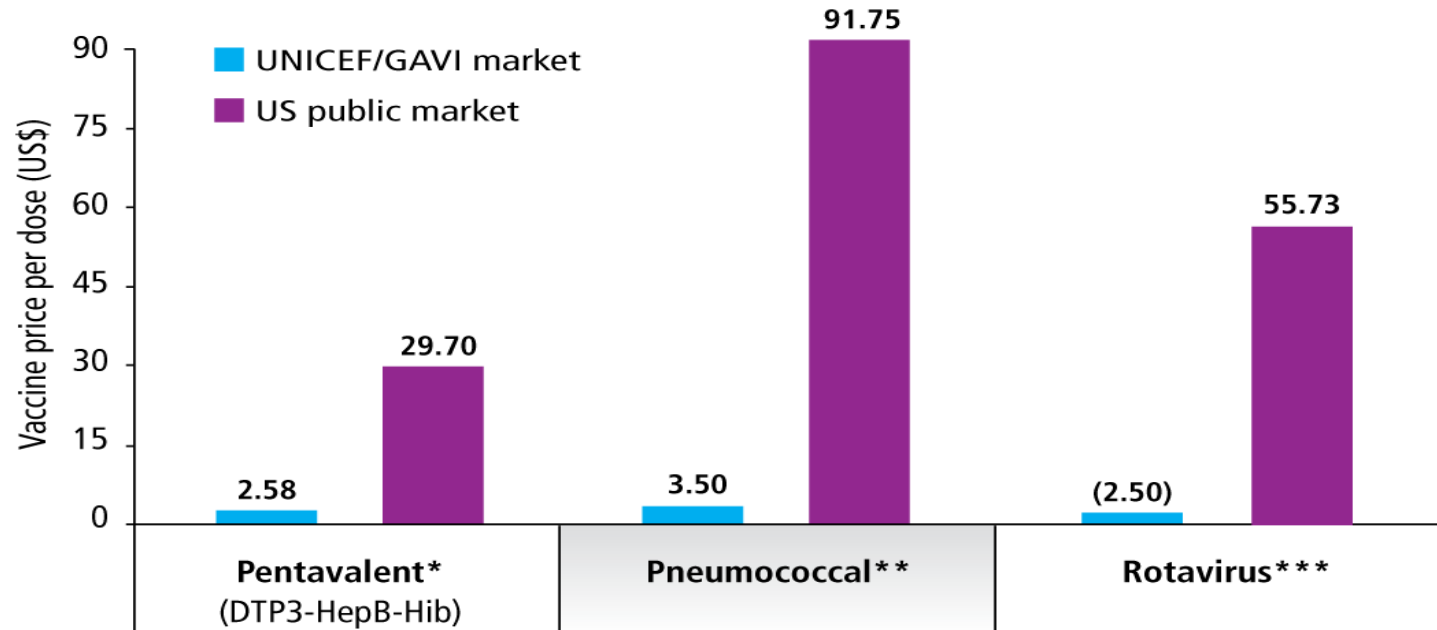
The US\$ 7.6 billion in assured resources is comprised of US\$ 7.3 billion in donor support and a further US\$ 0.3 billion in investment income and cash and investment reserve drawdown.

US\$ 332 million of the US\$ 7.3 billion in donor support is reserved to match new commitments by other donors after 13 June 2011.



USAID
FROM THE AMERICAN PEOPLE

New vaccines and tiered pricing



* Average price per dose for 3-dose vaccines between 2006–2009.

** 2010 price for 13-valent vaccines (US public market) and price for AMC vaccines (UNICEF/GAVI market). Under the AMC, companies will receive an additional payment of US\$ 3.50 per dose for approximately 20% of the total number of doses they provide. This additional payment is funded by donor commitments.

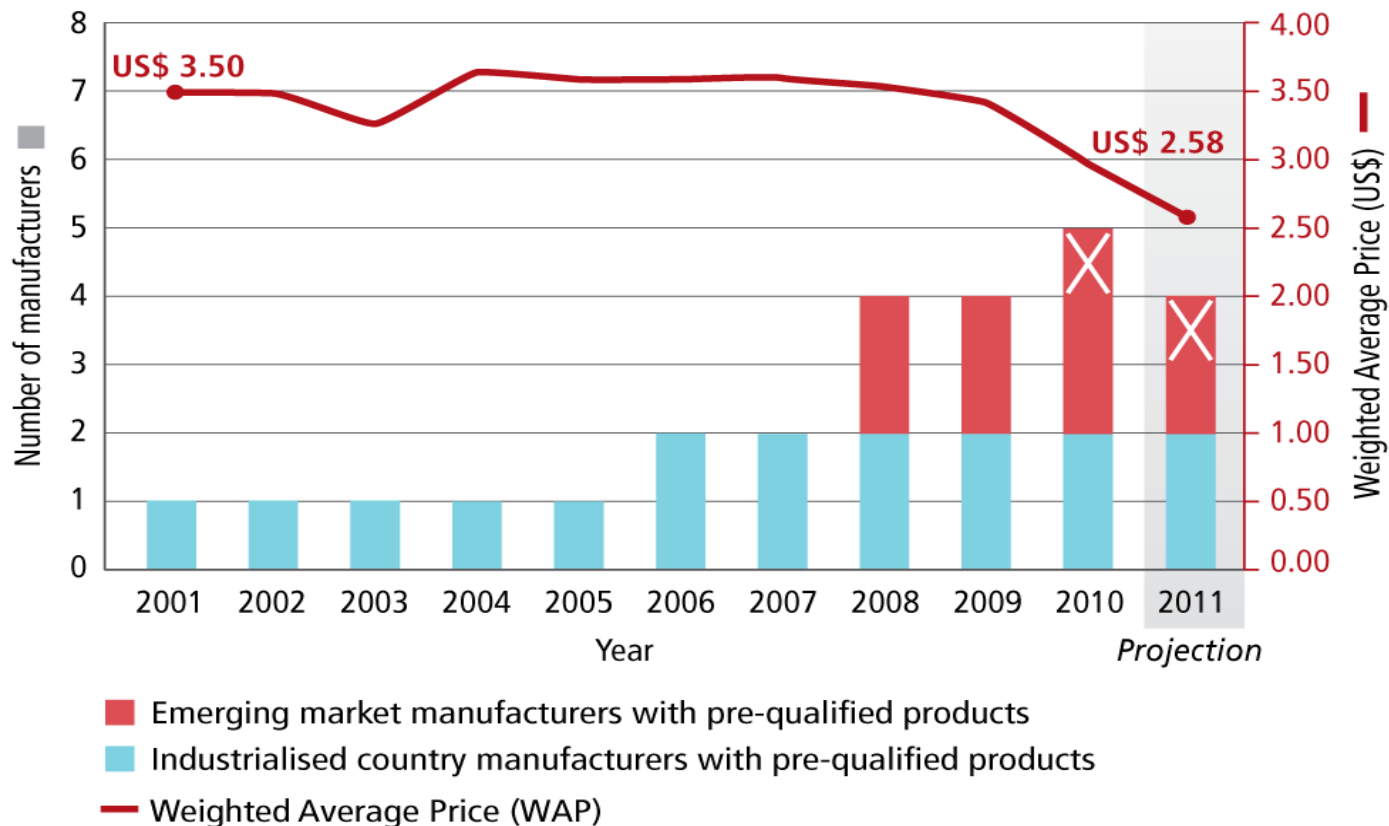
*** 2010 average price per dose assuming 3-dose equivalence among available products (US public market). Price through UNICEF not yet available.



USAID
FROM THE AMERICAN PEOPLE

Consistent, pooled funding and increased competition reduces vaccine price

Number of manufacturers and price decline of pentavalent vaccine



Source: UNICEF Supply Division, 2011



USAID
FROM THE AMERICAN PEOPLE

Role USAID plays



USAID
FROM THE AMERICAN PEOPLE

USAID's role

USAID's vaccines and immunization programs serve two functions:

1. Donor agency – provide funds to areas that help to achieve our mission of reducing child mortality through immunization, (global, regional, country levels)
 2. Policy development - engage in policy dialogue and development (global and country level), and
 3. Technical support – engage in technical dialogue and development and to provide technical support (global and country level).
- USAID and vaccine development
 - Malaria vaccine development
 - Malaria Vaccine Initiative at PATH
 - U.S. Department of Defense
 - HIV/AIDS vaccine development
 - IAVI: International AIDS Vaccine Initiative



USAID
FROM THE AMERICAN PEOPLE

How does USAID invest in immunization?

Global level investments in immunization:

1. **Polio eradication** (total of approximately \$550 M to date: through UNICEF, WHO, in country partners, NGOs)
2. **GAVI Alliance** (total of \$736 M to date all to vaccine procurement)
3. WHO for quality, affordable vaccine supply and support for key in-country staff
4. CDC for country level support for surveillance and new vaccine introduction support
5. MCHIP – our Maternal/Child Health Flagship technical project to support USAID Missions – strategic support to certain countries



USAID
FROM THE AMERICAN PEOPLE

How does USAID invest in immunization?

Regional level investments in immunization

1. Primarily Africa Bureau, some from Eastern European
2. Largely invest through WHO supporting people and processes regionally and in strategic countries

Mission level investments in immunization is always decided with the host government

Mission funding is autonomous

Options around how to support

1. in-country bilateral
2. existing mechanism (like MCHIP, CDC, WHO, UNICEF)



USAID
FROM THE AMERICAN PEOPLE

Countries in which USAID supports immunization specifically

Afghanistan

Bangladesh

Dem Rep of Congo

India

Indonesia

Kenya

Malawi

Mali

Mozambique

Nigeria

Rwanda

Senegal

Tanzania

Timor-Leste

Ukraine

Zambia

Zimbabwe

Central Asia

(does not include polio specific countries)



USAID
FROM THE AMERICAN PEOPLE

For more information go to:

- <http://www.who.int/immunization/en>
- <http://www.unicef.org/immunization>
- <http://www.gavialliance.org>
- <http://www.measlesinitiative.org>
- <http://www.polioeradication.org>
- <http://www.gatesfoundation.org>
- <http://www.dovcollaboration.org>
- <http://www.usaid.gov> (search on immunization)

end